

In the Claims

CLAIMS

What is claimed is:

1. (Currently Amended) A pneumatic ~~Pneumatic~~ brake
5 booster, ~~in particular~~ for a motor vehicle, comprising
a piston (22) mounted between a control rod (24) and a
push rod (34), the control rod being terminated by a
distributor plunger (28) guided translationally in a
10 housing (48) of the piston, and a three-way valve (30)
mounted in the piston (22) around the control rod (24)
and comprising a shutter (56) engaging with a seat of
the piston (22) and with a seat (70) of the distributor
plunger (28), a cylindrical sleeve (46) mounted in an
15 axially sliding manner in said housing (48) around the
distributor plunger (28), and means (52) which
permanently urge the sleeve (46) elastically toward the
shutter (56) of the three-way valve in order to move
~~this said~~ shutter away from ~~its~~ a seat (70) on the
distributor plunger (28) and ~~thus~~ to increase the
20 supply of atmospheric air to a working chamber (16) of
the booster, means (58, 58') for axially locking the
sleeve (46) when the shutter (56) is in a moved-away
position, and means (66) for unlocking the sleeve which
are sensitive to the speed of movement of the control
25 rod (24) and of the distributor plunger (28) in the
direction of braking and which unlock the sleeve (46)
when this speed is at least equal to a predetermined
value, characterized in that the means for axially
locking the sleeve (46) are arranged in the housing
30 (48) of the piston between the distributor plunger (28)
and the piston (22) and comprise an elastically
deformable element (58, 58') for retaining the sleeve
(46), ~~this said~~ element (58, 58') being mounted in an
annular groove or slot in the body (42) of the piston
35 (22).

2. (Currently Amended) ~~Booster~~ The booster according
to Claim 1, characterized in that a part (64) of the
retaining element (58) bears on a ramp or oblique

surface (66) of the distributor plunger (28) so that it can be moved away from said plunger and release the sleeve (46) when the distributor plunger (28) is moved axially toward the push rod (34) with respect to the piston (22).

3. (Currently Amended) ~~Beoster~~ The booster according to Claim 1 ~~or 2~~, characterized in that the retaining element (58) is formed by a spring steel wire stirrup comprising at least one kink housed in said groove in the housing (48) of the piston and at least one kink (62) housed in a notch or slot in the sleeve (46).

4. (Currently Amended) ~~Beoster~~ The booster according to Claim 3, characterized in that the retaining element (58) comprises at least two opposed kinks (62) housed in notches or slots in the sleeve (46).

5. (Currently Amended) ~~Beoster~~ The booster according to ~~one of the preceding claims~~ claim 4, characterized in that the sleeve (46) is able to slide axially in a sealed manner in the housing (48) of the piston (22).

6. (Currently Amended) ~~Beoster~~ The booster according to ~~one of the preceding claims~~ claim 5, characterized in that the sleeve end rim (54) intended to be applied against the shutter (56) forms a sealing seat for the shutter.

7. (Currently Amended) ~~Beoster~~ The booster according to ~~one of Claims 1 to 6~~ claim 6, characterized in that the retaining element (58) limits the axial movement of the sleeve (46) toward the shutter (56) of the three-way valve.

8. (Currently Amended) ~~Beoster~~ The booster according to ~~one of Claims 1 to 7~~ claim 7, characterized in that it comprises means (72) borne by the piston (22) to limit the axial movement of the distributor plunger

(28) with respect to the piston (22) toward the shutter (56) of the three-way valve and to define a rest position for the distributor plunger (28).

5 9. (Currently Amended) ~~Booster~~ The booster according to Claim 8, characterized in that said movement-limiting means comprise a rod or a clip (72) engaged in openings (74, 76) in the cylindrical walls of the piston (22) and in the sleeve (46) and are able to move
10 axially over a limited travel with respect to the piston (22).

10. (Currently Amended) ~~Booster~~ The booster according to Claim ~~8~~ 9, characterized in that said movement-limiting means (72) also form means for returning the
15 sleeve (46) to an axial-locking position in the housing (48) of the piston, in which the sleeve (46) is moved away from the annular shutter (56) of the three-way valve.

20 11. (Currently Amended) ~~Booster~~ The booster according to ~~one of Claims 8 to 10~~ claim 10, characterized in that the means (72) for limiting the movement and for defining a rest position for the distributor plunger
25 (28) are substantially in the same transverse plane as the means (58') for axially locking the sleeve (46).

12. (Currently Amended) ~~Booster~~ The booster according to Claim 11, characterized in that the means (72) for
30 limiting movement and for defining a rest position for the distributor plunger (28) and the means (58') for axially locking the sleeve (46) are mounted by elastic snap-fastening on the body (42) of the piston.

35 13. (Currently Amended) ~~Booster~~ The booster according to ~~one of the preceding claims~~ claim 12, characterized in that a washer (80, 86, 94) is interposed with an axial clearance between the end of the distributor plunger (28) and a reaction disk (40) mounted between

the piston (22) and the push rod (34), this washer (80, 86, 94) being housed in a recess (82) in the end of the piston (22) and being applied against the bottom of this recess in order to transmit a reaction force while
5 the distributor plunger (28) is returning to a rest position or non-braking position.

14. (Currently Amended) ~~Booster~~ The booster according to Claim 13, characterized in that the washer (80) is a
10 flat washer and transmits a reaction force to the piston (22).

15. (Currently Amended) ~~Booster~~ The booster according to Claim 13, characterized in that the washer (86) is
15 guided in axial translation in a ring (88) guided in axial translation in the recess (82), the ring having an axial length which is greater than that of the washer, and the washer (86) transmits a reaction force to the distributor plunger (28).

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16. (Currently Amended) ~~Booster~~ The booster according to Claim 13, characterized in that the washer (94) comprises an axial cylindrical tail (96) which transmits a reaction force to the distributor plunger
25 (28).